



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,638	07/01/2003	Thomas Wulff	1571/SYMBP161US	1383

23623 7590 09/11/2006

AMIN, TUROCY & CALVIN, LLP  
1900 EAST 9TH STREET, NATIONAL CITY CENTER  
24TH FLOOR,  
CLEVELAND, OH 44114

EXAMINER
----------

TRUJILLO, JAMES K

ART UNIT	PAPER NUMBER
----------	--------------

2116

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/611,638	<b>Applicant(s)</b> WULFF, THOMAS	
	<b>Examiner</b> James K. Trujillo	<b>Art Unit</b> 2116	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>080703</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The office acknowledges the receipt of the following and placed of record in the file:

Response to Election / Restriction Filed 7/24/06.

#### ***Election/Restrictions***

2. Upon further consideration the examiner has withdrawn the previous election/restriction requirement.
3. Claims 1-19 are presented for examination.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-9, 11-17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsurumaru et al., U.S. Patent 6,302,454.

6. Regarding claim 1, Tsurumaru, teaches a system for controllably releasing a power supply, comprising:

- a. a host device that employs a computer program while powered by a removable power supply (wherein the portable device of Tsurumaru is a host device and a computer program is inherently running prior to the battery swap mode being entered, col. 3, lines 19-20 and col. 8, lines 19-28); and;

- b. a retaining assembly operatively coupled to the host unit for accepting the removable power supply, the retaining assembly adapted to delay release of the power supply from the host device until at least a shut down of the computer program (figure 3, col. 6, lines 30-36 and col. 8, lines 19-28).
7. Regarding claim 2, Tsurumaru taught the system according to claim 1, as described above. Tsurumaru further teaches the retaining assembly adapted to release the power supply after shut down of the computer program (col. 6, lines 30-36).
8. Regarding claim 3, Tsurumaru taught the system according to claim 1, as described above. Tsurumaru further teaches the retaining assembly adapted to release the power supply without cold boot and loss of data associated with the host unit (entering a resume operation and data is saved and prevented from being destroyed, col. 8, lines 19-28).
9. Regarding claim 4, Tsurumaru taught the system according to claim 1, as described above. Tsurumaru further teaches wherein the computer program is an application program (col. 8, lines 19-28).
10. Regarding claim 5, Tsurumaru taught the system according to claim 1, as described above. Tsurumaru further teaches wherein the power supply is a battery (battery 15, col. 6, lines 30-31).
11. Regarding claim 6, Tsurumaru taught the system according to claim 1, as described above. Tsurumaru further teaches wherein the host device is at least one of a portable scanner and a computer (figure 7).
12. Regarding claim 7, Tsurumaru taught the system according to claim 1, as described above. Tsurumaru further teaches wherein the retaining assembly comprises at least one of an

Art Unit: 2116

actuator and a solenoid (wherein the battery lock mechanism is interpreted to be an actuator, col. 3, lines 28-34).

13. Regarding claim 8, Tsurumaru taught the system according to claim 1, as described above. Tsurumaru further comprises an artificial intelligence for providing a stimulus to the retaining assembly (requiring a period of time to ensure that the resume operation is properly completed and appropriately saving data, col. 8, lines 19-28).

14. Regarding claim 9, Tsurumaru taught the system according to claim 1, as described above. Tsurumaru further comprises an automatic shut down mechanism as to initiate a shut down of the host device (resume operation properly completed, col. 8, lines 22-28).

15. Regarding claim 11, Tsurumaru teaches a battery release mechanism, comprising:

- a. a battery receiving compartment being part of a host unit that runs a computer program (figure 3); and,
- b. at least one battery latch or catch structure operatively connected to the battery receiving compartment and adapted to delay release of a battery until on or after a shutdown of the computer program (figure 3).

16. Regarding claim 12, Tsurumaru further teaches a battery release mechanism according to claim 11, the at least one catch or latch structure comprises a notch being engaged with a side of the release mechanism (figure 3).

17. Regarding claim 13, Tsurumaru further teaches a battery release mechanism according to claim 11, the at least one catch or latch mechanism releases the battery in two stages (col. 6, lines 30-32).

Art Unit: 2116

18. Regarding claim 14, Tsurumaru teaches a method for controllably releasing a power supply from a host device comprising:

- a. providing a host unit employing a computer program while powered by a removable power supply (col. 1, lines 34-37, col. 1, lines 44-49 and col. 6, lines 30-36); and
- b. providing a retaining assembly operatively coupled to the host unit for accepting the removable power supply, the retaining assembly adapted to delay release of the power supply from the host until at least a shut down of the computer program (figure 3).

19. Regarding claim 15, Tsurumaru teaches method for controllably releasing a power supply from a host unit comprising:

- a. providing a host device with a logic unit and a power supply retaining assembly (figure 3);
- b. initiating a powering off for the host device (initiation of a resume operation, col. 5, lines 60-63);
- c. sending a stimulus from the logic unit to the power supply retaining assembly for initiating release of the power supply (resume operation, col. 5, lines 60-63);
- d. delaying a release of the power supply until at least a shut down of a computer program associated with the host device (col. 6, lines 30-36).

20. Regarding claim 16, Tsurumaru taught the method according to claim 15, as described above. Tsurumaru further teaches sending the stimulus prior to initiating the powering off for the host device (the initiation of the resume is sent before the power is removed, col. 5, lines 60-63 and col. 6, lines 30-36).

Art Unit: 2116

21. Regarding claim 17, Tsurumaru taught the method according to claim 15, as described above. Tsurumaru further teaches comprising ejecting the power supply from the retaining assembly via an actuator (wherein mechanical actuators in lock mechanism 20 are used to remove the battery, col. 5, line 49 through col. 6, line 6).

22. Regarding claim 19, Tsurumaru taught the claimed system and method as set forth hereinabove, therefore he also teaches the claimed system with the means for retaining the power supply.

*Claim Rejections - 35 USC § 103*

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsurumaru in view of Flanigan, U.S. Patent 6,587,951.

25. Regarding claim 10, Tsurumaru taught the method according to claim 1, as described above. Tsurumaru further teaches comprising a release assembly for releasing the removable power supply (figure 3). Tsurumaru does not explicitly disclose wherein the release assembly comprises an emergency release since it requires the system to change state to a shut down of the computer program ("resume state").

Flanigan teaches method to enter a shut down state in an emergency (wherein an emergency is interpreted to be when the system is locked, and the "resume" is where the

Art Unit: 2116

computer system is shut down, col. 2, lines 5-8). Flanigan provides the advantage of shutting down the system when the system fails to respond (col. 2, lines 11-17).

It would have been obvious to one of ordinary skill in the art, having the teachings of Tsurumaru and Flanigan before them at the time the invention was made to modify the system of Tsurumaru to include entering a shut down state in an emergency as taught by Flanigan.

One of ordinary skill in the art would have been motivated to make this modification in order to shut down the system when the system fails to respond. This would allow the power supply of Tsurumaru to be removed when the shut down cannot be entered because the system fails to respond to a “resume” interrupt.

26. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsurumaru in view of Spears et al., U.S. Patent 6,304,981.

27. Tsurumaru taught the method according to claim 15, as described above. Tsurumaru does not explicitly disclose further comprising estimating via a logic unit a time for shut down of the computer program from powering off for the host device.

Spears teaches a system comprising estimating via a logic unit a time for shut down of the computer program from powering off for the host device (figure 7). Spears further teaches that it is advantageous to provide a system that determines the time required to reach a safe shut down to prevent a catastrophic loss of data so that an appropriate time may be set to allow proper shut down (col. 1, lines 24-40).



It would have been obvious to one of ordinary skill in the art, having the teachings of Tsurumaru and Spears before them at the time the invention was made to modify the system of Tsurumaru to include estimation of time for shut down as taught by Spears.

One of ordinary skill in the art would have been motivated to make this modification in order to provide an appropriate time for a proper shut down in view of Spears.

### *Conclusion*

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,847,192 to Turner et al., teaches a device that prevents the battery from being removed until the device is placed in a standby mode.

U.S. Pat. No. 5,832,282 to Pate et al., teaches causing a computer to enter a shut down mode when the battery is removed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James K. Trujillo whose telephone number is (571) 272-3677. The examiner can normally be reached on M-F (8:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



James K. Trujillo  
Primary Examiner  
Technology Center 2100